

Descriptions of some new forms of aberrant Melolonthini from Australia:
forming a distinct subtribe (*Systemeloides*), by D. SHARP.

In this paper I have given the characters of some very interesting Australian beetles which I consider should be associated together to form a distinct subtribe in the sense of Lacordaire (Gen. des Coléoptères), the natural position of which subtribe should in my opinion be at the commencement of the *Melolonthini* near to the Glaphyridae. I have included in this group eight species, all I believe new, and which I have been obliged to consider as representing seven new genera.

It is probable that besides these species, the *Prochelyna heterodoxa* Er., and the *Metascelis flexilis* West. should be included in this group; but neither of these species is known to me, and both are very imperfectly characterized; of *Metascelis flexilis* the habitat even is unknown: I think it probable however that *Metascelis flexilis* may prove allied to *Chilodiptus Albertisii*, and *Prochelyna heterodoxa*, to *Atholerus obscurus*.

Lacordaire associated the *Prochelyna heterodoxa*, and the *Metascelis flexilis* with the European *Pachypus*, and some other insects, in a subtribe which he called *Pachypodides*; now though it is undoubtedly the case that the Australian insects which I here describe and name have some points of structure in common with *Pachypus*, yet they have some other important points in which they are very different from it, and this fact renders their association in the same sub-tribe unnatural. These differences consist in the position and form of the labrum, and in the structure of those portions of the hind body (or abdomen) in which the stigmata are placed; the structure of these latter parts in *Pachypus* being extremely peculiar, although it has as yet escaped description. Those points are so important as to make it advisable to separate *Pachypus*, and the other European and African forms from the Australian insects, which I consider form a remarkably distinct subtribe; and I propose to call it *Systemel-*

topides. *Pachypus* also is unnaturally associated with *Elaphocera* and *Pachydema*; but I merely make this remark in passing, for to follow out the peculiarities of *Pachypus* or to consider its allies would be here quite out of place.

The following table and characters will I hope enable students to distinguish these forms, and will give an approximation to their synthetic relations.

<i>Sphyrocalus</i> <i>brunneus</i> .	upper face of labrum consisting of one part	Clypeus separated from front by a raised ridge; inner faces of antennal lamellæ, without erect hairs.	Labrum largely developed, fixed to the front of the clypeus, and on the same plane with it. Maxillary lobes atrophied. Posterior legs incrassate. Abdominal stigmata small, placed as in the normal <i>Melolonthini</i> .
<i>Chilodiphus</i> <i>Albertisii</i>	upper face of labrum with two parts not quite on the same plane		
<i>Systellopus</i> <i>validus</i> .	antennal club large, consisting of 5 similar joints; hind legs extremely thick, their tarsi moderately long.	Clypeus separated from front by a depressed suture; inner faces of antennal lamellæ without erect hairs.	
<i>Systellopus</i> <i>robustus</i>	antennal club large, consisting of 6 similar joints; hind legs moderately thick, their tarsi rather long.		
<i>Atholerus</i> <i>obscurus</i>	antennal club, only moderately large, consisting of 5 similar joints; hind legs moderately thick, their tarsi very long, and slender	Inner faces of antennal lamellæ, set with fine erect hairs.	
<i>Tosolarus</i> <i>velutinus</i>	antennal club moderately long, consisting of 5 joints.		
<i>Trichetasmus</i> <i>pilicollis</i>	antennal club long, consisting of six joints		
<i>Encamilus</i> <i>striatus</i>			

Sphyrocallus.

Antennæ 9-jointed, third joint quite short, fourth with a small projection in front, the five apical joints very similar to one another, and forming a very elongate club. Maxillary palpi elongate and slender, their 2.nd joint very long, about as long as the 3.rd and 4.th together. Mentum moderately broad, but with the labial palpi much exerted, and apparently contiguous at their insertion. Labrum very large. Hind legs short and thick, except the tarsi which are moderately long and slender. Ventral segments moderately short. The general appearance and colour of this form is much that of the ordinary *Melolonthini*, such as *Rhizotrogus*.

Sphyrocallus brunneus n. sp. *Sat elongatus, brunneus, nitidus, thorace corporeque subtus hirsutis; capite fortiter punctato, fronte piligera; elytris striatis, interstitiis punctatis.* Long. $16 \frac{1}{2}$ mill.

The labrum is long as well as broad, and its upper surface shining, and only obsoletely punctured: the large clypeus is closely and coarsely punctured, and is separated from the forehead by a strongly elevated ridge, the hind part of this ridge bears long hairs directed backwards. The thorax is not very closely nor coarsely punctured, and is shining but bears rather numerous, long, depressed hairs, its hind margin is densely pubescent, the pubescence extending over the scutellum and the base of the elytra. The elytra are rather deeply striated, the striæ being placed in pairs and abbreviated, and the interstices are irregularly punctured, the outer margin is closely ciliated with coarse hairs, and such ciliæ are densely packed at the rounded, internal, sutural angles. The pygidium and propygidium are coarsely punctured, and bear long hairs. The metasternum is elongate, and as well as the hind coxæ is rather densely clothed with long hairs.

The individual of this species in my collection is the only

one I have seen and was found by Duboulay in North-west Australia.

Chilodiplus.

Antennæ 9-jointed, third joint very short, fourth with a short projection in front, the five apical joints very similar to one another, and forming an elongate club. Maxillary palpi moderately long, their 2.nd joint not so long as the 4.th. Mentum elongate and slender, the labial palpi contiguous at their base and quite exposed, their insertion being at the very extremity of the narrow mentum. Labrum very large, and with a large, exposed, punctured part in front. Hind legs short and thick, their tarsi not very long. Ventral segments moderately short. The facies approaches that of the Glaphyrides.

Chilodiplus Albertisii n. sp. *Colore variabilis, testaceus, plus minusve infuscatus, supra nudus, nitidus, subtus griseo-hirsutus; capite fortiter punctato, sed labri parte posteriore omnino laevi; prothorace minore, anterieus fortiter angustato, sparsim vage punctato; scutello magno parte aperta fere laevi; elytris minus evidenter seriato-punctatis, interstitiis vage punctatis, lateribus evidenter ciliatis; pygidio sat nitido, setis tenuibus, erectis, paucis. Long. 12-13 millim.*

In this species the skeleton is softer than in most of the Lamellicorns. The thorax is quite shining, and has the sides yellowish, the middle part being infuscate to a variable extent. The elytra are dehiscent, and are distinctly but not coarsely punctured, the punctures being arranged in obscure abbreviated series, the sutural one is however entire; they are rugose at the apex, and are coarsely ciliated.

This curious species was discovered at Somerset Cape York, in Jan. 1875 by Signor L. M. D'Albertis after whom I have named it.

The three specimens I have examined are variable in colour; the ground colour is yellowish, more or less suffused with

black, the black colour in one of the individuals predominating over the yellow: this dark specimen on dissection proves to be a male, the other two individuals I believe to be females, as they have the apical ventral segment rather shorter.

Systellopus.

Antennæ 9-jointed, the fourth joint very short and prolonged in front, the last five joints about equal to one another in size, and forming a rather elongate club; head with an impressed rather curved line between the eyes; otherwise without impressions or elevations, the clypeus rounded at the sides and in front; the labrum placed on the same level (or plane) as the front of the clypeus, and soldered thereto, but still very distinct; it is transverse, with the front angles rounded, and is a little narrower than the clypeus; on its underface it is longitudinally thickened along the middle. Mandibles concealed, short, stout at the base, but with the anterior portion laminate and truncate at the extremity; the base on the inside with a small molar tooth which has only two ridges.

Mentum rather broad, its extremity in the middle pointed, but a little curved upwards towards the ligula; ligula distinct and rather large in proportion to the mentum; labial palpi evidently inserted between the upper face of the mentum and the lower one of the ligula, rather widely separated from one another, short and stout, apparently only two jointed, the first of the two joints very short not reaching beyond the extremity of the ligula, the 2.nd rather long, at the extremity slightly curved inwards. Maxillæ with the support of the palpi largely developed (nearly as long as the palpus), the lobes apparently absent, but probably soldered to the inside of the support, the upper one terminating in a shining, hairless process, from which projects inwardly a small obscure black tubercle or tooth: palpi stout and rather short, the first joint more slender than the others, 2.nd narrow at the base, broad at the extremity, 3.rd shorter than 2.nd, 4.th about as long as the two preceding to-

gether. Anterior coxæ very large and prominent. Middle coxæ contiguous. Metapleura large, broad at the anterior, narrow at the posterior, extremity; its epimeron rather large. Hind coxæ extremely broad. Hind legs very thick, the front margin of their femora semicircular, the tibiæ extremely short, and much dilated; their tarsi slender, with rather long, slender, equal claws. Hindbody very short on its ventral face, and with the individual segments very short, the sutures deep and distinct; the segments are apparently five in number, the penultimate one being largely membranous at its hind margin; on dissection however, seven ventral plates are found, the basal one rather large, and quite membranous, the 2.nd one very large and semimembranous. Abdominal stigmata placed as in the ordinary form of *Melolonthini*, but owing to the abbreviation of the ventral plates, the last stigma is quite concealed by the overlapping edge of the ventral plate of the preceding segment; pygidium abruptly deflexed, acuminate.

Systemolopus obtusus n. sp. *Nigerrimus, subopacus, thorace elytrisque sericeo-opalescentibus; capite dense fortiterque punctato; thorace sparsim subtiliter punctato; elytris fere impunctatis, obsolete striatis, sed stria suturali magis distincta; corpore subtus parce nigro pubescente; elytrorum angulo apicali suturali obtuso. Long. 16 1/2 millim.*

The two specimens I have seen of this species, are both I believe males; one of them I have ascertained by dissection to be of that sex, and the other shews no external difference that I can consider to be sexual; they are from different sources, one of them being labelled North-west Australia, the other West Australia.

Systemolopus validus n. sp. *Nigerrimus, subopacus, thorace elytrisque sericeo-opalescentibus; capite dense, fortiterque punctato; thorace sparsim subtiliter punctato; elytris fere impunctatis, obsolete striatis, sed stria suturali magis distincta; corpore subtus parce nigro-pubescente; elytrorum apice sinuato, angulo suturali recto. Long. 21 millim.*

This species is closely allied to *S. obtusus*, but it is larger, and differs by several minute distinctions in the form of some of the parts, such as the labrum and tarsi; though these differences cannot be easily conveyed by a verbal description, I think that the difference in the apex of the elytra, if it prove to be constant, will afford an easy means of discriminating the two species.

I have seen only a single specimen which was sent from Western Australia by M.^r Duboulay.

Atholerus.

Antennæ 9-jointed, third joint rather long, the six apical joints very similar to one another, and forming a moderately long club. Maxillary palpi neither very long, nor very slender, 2.nd joint a good deal shorter than the 4.th. Mentum rather broad and not very long, the labial palpi short, and their cavities of insertion separate, so that they are not contiguous at their base, and are not inserted at the extreme apex of the mentum. Labrum large, but transverse, and with only a single part visible from above. Hind legs moderately thickened and their tarsi rather long.

This form is perhaps that to which *Prochelyna heterodoxa* Er. is nearest allied, but according to Burmeister that insect has a very small, slender mentum: while in the form here named *Atholerus* the mentum is broad and large.

Atholerus obscurus n. sp. *Nigricans, antennarum basi pedibusque rufis, his tibiis tarsisque piceis, opacus, supra nudus, subtus griseo-pubescentis; clypeo fortiter rugoso-punctato; prothorace omnino opaco et impunctato: elytris basin versus indeterminate fuscis, impunctatis, sed versus suturam striatis; pygidio laevi nitido. Long. 13 millim.*

Found at Swan River by M.^r Brewer.

Tosotarsus.

Antennæ 9-jointed, the fourth joint without any appendage, the five apical joints forming a moderately long club. (Maxillæ and their palpi not observed). Mentum rather large and broad, the labial palpi very short, and rather widely separated. Hind coxæ moderately broad. Hind legs short and thick, but their tarsi very elongate and slender, quite twice as long as the tibiæ.

This form though appearing very different from *Systemolopus* appears to be very closely allied thereto, but has the six terminal joints of the antennæ less developed; and the hind legs more elongate and slender, the tarsi being remarkably elongate.

Tosotarsus velutinus n. sp. *Nigricans, antennarum basi pedibusque rufis, subtus fulvo-hirsutus; clypeo labroque nitidis, illo fortiter punctato, vertice opaco fere impunctato; thorace subopaco, sparsim obsolete punctato, basi fulvo-hirsuto; elytris omnino opacis, versus suturam striatis, striis latis sed minus profundis; pygidio nitido. Long. 12-14 1/2 millim.*

The long and conspicuous pubescence of the underside of this insect is chiefly attached to the legs.

The only two individuals I have seen of this species are much mutilated, and bear no indication of locality but Australia.

Trichelasmus.

Antennæ 9-jointed, third joint very short, fourth extremely short, scarcely produced in front, the five apical joints about equal in size and forming a moderately large club, the lamellæ composing which are furnished on their inner faces, with fine short, erect hairs; the first and last joints of the club, on the under face wrap over and conceal the other joints, while on the upper face the edges of the 2.nd and 3.rd lamellæ are thicker than the others. Maxillary palpi moderately long, 2.nd and 3.rd joints subequal, each of them shorter than the fourth. Mentum

moderately broad and long, the labial palpi very short and not quite contiguous at their base. Labrum very large, its front margin elevated and sharply defined. Hind legs short, rather thick, their tarsi long and slender. Ventral segments very short.

Trichelasmus pilicollis n. sp. *Nigricans, opacus, clytris velutinis, prothorace corporeque subtus fulvo-hirsutis, antennis pedibusque rufis, illarum clava infuscata; clytris striatis; pygidio laevi, nitido. Long. 11-12 millim.*

Upper surface of labrum shining and impunctate. Head coarsely but not very densely punctured. Thorax finely punctured, but the sculpture quite concealed by a long, dense pubescence of tawny colour. Elytra very dull, quite distinctly striated but with the external striæ obsolete, the striae when closely examined are seen to be obsoletely punctured. Legs entirely red.

Found by M.^r Brewer in South west Australia. My two individuals were not found together, one is labelled, Albany, the other K. Geo. Sound; they shew some slight distinctions which may be either sexual, or characteristic of two very closely allied species.

Enamillus.

Antennæ 9-jointed, third joint rather long, the six apical joints about equal in size, and forming a large club, the first and last leaves of which on the under face enfold and wrap over the others, the lamellæ furnished on their inner faces, with dense, fine, erect hairs. Mentum short, labial palpi not contiguous at their base. Labrum very large. Hind legs short, not very thick, their tarsi long and slender. Ventral segments extremely abbreviate.

This form is extremely similar to *Trichelasmus*, but has six long lamellæ to the antennæ. The mentum also appears to be differently formed, but this I cannot very well distinguish in the only individual at my disposal.

Enamillus striatus n. sp. *Nigricans, opacus, elytris velutinis, prothorace corporeque subtus fulvo-hirsutis, antennis fusco-testaceis, pedibus rufis; elytris striatis, striis sat distincte punctatis: pygidio laevi, nitido. Long. $11\frac{1}{2}$ millim.*

This species is excessively similar to *Trichelasmus pilicollis*, but the elytra have nine striæ to be distinctly counted on each, and these striæ are distinctly punctured.

Sent by Duboulay from West Australia.